December 2007 Update

Montana Pole and Treating Plant Superfund Site

Butte, Montana
(Five-Year Review Date: 6/27/06)

Brief Site History: The Montana Pole and Treating site is an abandoned 40-acre wood treating facility in Butte, Montana. From 1946 to 1983, the facility preserved utility poles, posts and bridge timbers with pentachlorophenol (PCP). Hazardous substances from the pole-treating operations were discharged into a ditch next to the plant that ran toward Silver Bow Creek. The groundwater and soils at the Montana Pole site are contaminated with PCPs, dioxins, furans (flammable liquids from wood oils), volatile organic compounds (VOCs) and metals. The sludge also is contaminated with PCPs, dioxins and furans. PCP has been detected in Silver Bow Creek.

Accidentally swallowing or having direct contact with groundwater, surface water, soil or sludge can be hazardous to human health. Contaminants may enter the air naturally or during cleanup operations, presenting another potential source of exposure. The site was proposed for addition to the Environmental Protection Agency's (EPA's) Superfund National Priorities List (NPL) in June 1986. The final date of its addition to the NPL was July 1987.

Cleanup Activities Completed: A number of removal and remedial activities have been conducted since 1988, including the following:

- Excavation of approximately 200,000 cubic yards of contaminated soil;
- Construction of a land treatment unit to biologically treat the soil;
- Construction of a carbon water treatment plant with extraction of the groundwater, treatment of the groundwater with nutrients; and,
- Reinjection of the treated groundwater.

Current Status: The site is currently in the Operation & Maintenance phase.

Summary of Protectiveness: The remedy at the Montana Pole and Treating Plant is expected to be protective of human health and the environment upon completion, and immediate threats have been addressed.

Issues Impacting Protectiveness: Excavation of soils and subsequent treatment is reducing concentrations of contaminants to Record of Decision (ROD) cleanup levels for PCP and B2PAHs. ROD cleanup levels for dioxins in soils have not yet been achieved through biological treatment. To protect surface or groundwater contact with backfilled soils that still contain elevated levels of dioxins/furans, soils are backfilled on clean fill extending at least one foot above the historic high groundwater mark and are covered by at least one foot of clean soil.

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Issues	Recommendations / Follow-Up Actions	Follow-Up Actions (Status/Due Date)	Status of Follow-Up Actions 12/07	Responsible Party
1) February 2006 changes in DEQ-7 human health standards.	Montana Department of Environmental Quality (DEQ) and EPA will evaluate changing the cleanup standards for dioxins in groundwater and in discharge to surface water to 2 pg/L and 0.13 pg/L respectively. DEQ and EPA will also evaluate changing the cleanup standard for cadmium in groundwater from 1.1 µg/L to .755 µg/L .	Looked at this issue this summer (2007).	- Complete - The remedy has been deemed appropriate and no Decision Document amendment is necessary.	DEQ and EPA
2) Changes in EPA-published toxicity equivalence factors (TEFs) for certain polynuclear aromatic hydrocarbons (PAHs)	DEQ and EPA will evaluate the need to lower the groundwater cleanup levels for both benzo(a)anthracene and indeno (1,2,3-CD)pyrene to 0.2 µg/L.	Looked at this issue this summer (2007).	- Complete - Even though the standards have changed, the levels in the ROD are risk-based and remain protective.	DEQ and EPA
3) Cleanup levels for PCP in soils.	DEQ and EPA will continue to evaluate the cleanup level for PCP in soils.	2011	Will not necessarily change site specific cleanup standards now, but if upon a future review we see a problem, we will evaluate at that time.	DEQ and EPA
4) Controlled Groundwater Area	DEQ and EPA will initiate the process to develop and implement a Controlled Groundwater Area for the Site.	2008	Over the next year or two a process will be developed; however, it will be subsequent to WTP operational changes discussed above.	DEQ and EPA